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ABSTRACT

By looking at progress of students from entry into postsecondary education (PSE) through completion of the bachelor's degree, it is possible to find out more about those students who do not go directly to college and graduate exactly 4 years after high school and compare them with more traditional peers. Data come from the National Longitudinal Study of the High School Class of 1972 (NLS-72) and its related Postsecondary Education Transcript Study conducted in 1984. Patterns of progress and attendance are shown for the 12-year period following high school. The two main topics addressed are: (1) the average time taken to complete each level of postsecondary education through a bachelor's degree; and (2) how many students take longer than normally expected to progress through postsecondary education. Results indicate the following: expectations for the time to complete any level or year of PSE are shorter by 3 to 9 months than actually taken by 1972 high school seniors; men are more likely to take longer at each level than women; the longer students wait to start PSE after high school, the more likely they are to take extra time to complete the freshman year; and completion of each level within the expected time contributes to continuation through the next level of postsecondary education. Two appendices are: methodology and technical notes (methodology, PSE computed variables, accuracy of estimates, and instructions for obtaining more information); and data for the study's figures. Contains 28 references. (SM)

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NATIONAL CENTER FOR EDUCATION STATISTICS

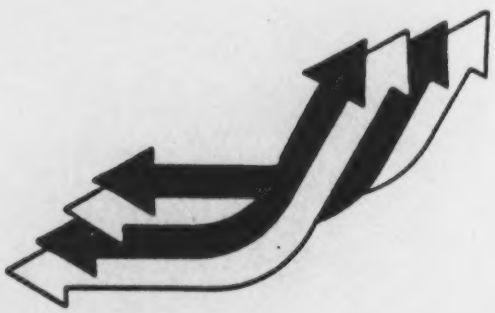
Survey Report

February 1989

Student Progress in College:

NLS–72 Postsecondary Education Transcript Study, 1984

Paula R. Knepper
Postsecondary Education Statistics Division



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Highlights

The majority of 1972 high school seniors entered postsecondary education (PSE) within 12 years of high school. Of those who entered PSE, over 40 percent earned a bachelor's (BA) degree within this period. The twelve year period provided a rare opportunity to analyze time needed for progress through the PSE system regardless of the highest level intended or time of entry. By looking at progress from entry into PSE through completion of the BA, there was an opportunity to find out more about students who do not go directly to college and graduate exactly 4 years after high school--the non-traditional students--and compare them with their more traditional peers.

- Expectations for the time to complete any level or year of PSE are shorter by 3 to 9 months than that actually taken by 1972 high school seniors. The freshman and senior levels were particularly prone to delay. BA completion took about 8 months longer than expected for the entire program, and over half of all completers required longer than the expected 45 months from start to finish.

- Men were more likely to take longer at each level than women, and took about three months longer overall to complete a BA. Minorities were more likely to start late and take longer to complete the freshman level, but overall took only a month or so longer at each of the other levels. High SES students were somewhat less likely to take longer than normally expected.

- The longer students waited to start PSE after high school, the more likely they were to take extra time to complete the freshman year. Those who started more than a year after high school needed almost 2 years to complete the freshman year, about six months longer than those who started within the first year after high school. There was no significant difference in the time needed to complete a BA based on time of entry after high school.

- Those who entered 4-year colleges did so more quickly than did those entering other types of schools. Those who entered private 2-year colleges or trade schools first did so nearly 3 years after high school on average, but they were least likely to take extra time for their freshman year. Those who entered 4-year colleges took 50-55 months to complete a BA. Those who first entered 2-year schools and ultimately completed a BA took about 60 months. Students entering private 4-year colleges were most likely to complete the BA within the expected time.

- Completion of each level within the expected time contributed to continuation through the next level (or year) of postsecondary education. The greatest delays were seen at the last level completed, regardless of highest level attained.

- Transferring from one college to another added 8 months or longer to BA completion time, depending on the type of transfer. It also added significantly to the likelihood of taking longer than expected for completion. Only 43 percent of those who did not transfer took longer compared to over 65 percent for those who did. This delay did not discourage completion, however.

Foreword

The National Center for Education Statistics, with support from other government agencies, has sponsored three longitudinal studies of U.S. students: The National Longitudinal Study of the High School Class of 1972 (NLS-72), High School and Beyond, which included both sophomore and senior high school students, and the National Education Longitudinal Study of 1988, involving eighth grade students. All of these longitudinal studies have had multiple data collection components.

This report is based on data from the NLS-72 and its related Postsecondary Education Transcript Study conducted in 1984. It provides additional insight into the process of entering and progressing through the postsecondary system by looking at patterns of progress and attendance during the 12 year period following high school. The information presented shows who entered postsecondary education, when, and how long it actually took to complete each level through the bachelor's degree. These analyses include non-traditional students and, where possible, point out the differences and similarities between them and traditional students.

The data analyzed for this report are available for secondary analyses on either mainframe or micro computers. Information about obtaining NLS-72 and related computer tapes, or those related to other longitudinal studies conducted by the Center, is available from the U.S. Department of Education, Office of Educational Research and Improvement, Information Technology Branch, 555 New Jersey Avenue, N.W., Room 214A, Capitol Place Building, Washington D.C. 20208-5725, or call 1-800-424-1616.

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Student Progress in College

1. Introduction

Traditional postsecondary expectations are that students enter college during the fall term immediately after high school graduation, persist full time for 4 years, and graduate with a bachelor's degree in the spring of the fourth year after high school graduation. The traditional student, then, is one who fully fits this mold by entering postsecondary education immediately after high school, is in attendance full time for 4 years, and graduates with a bachelor's degree 4 years after high school. The non-traditional student, on the other hand, is one who either first entered postsecondary education a year or more after high school, does not attend full time throughout the period of attendance, or does not complete a bachelor's degree in 4 years.

As studies have shown, less than half of the degree completers follow this traditional pattern (Hill, 1986; Lavin, 1984; Campbell, 1980; Eckland, 1964). However, it was not until the early 1980s that non-traditional students were beginning to be recognized as a significant factor in postsecondary education (Frances, 1980). A recent study conducted by the National Center for Education Statistics showed that 40 percent of all undergraduate students were age 24 or older, and about 23 percent were 30 or older (Korb, et.al., 1988). In fact, the number of students in postsecondary education over age 30 increased by 37 percent in the 1977-78 through 1987-88 period, and is expected to increase by another 15 percent in the next 10 year period. During that same period the number of college students in the 18-24 year range is expected to drop by 8 percent. Thus, older students will make up an additional 5 percent of the postsecondary population within 10 years, with the majority of that increase at the undergraduate level (U.S. Department of Education, 1988).

In order to understand persistence and progress through postsecondary education, it is necessary to consider both the positive and negative aspects of movement through the system. Many students who enter postsecondary education do not intend to earn a bachelor's degree. They may enter to earn a technical certificate or license, to improve their knowledge in a particular content area, or to gain additional or improved job skills. Thus, many who leave postsecondary education without having completed a bachelor's degree may have been successful in attaining their goals, while others may have met academic, social, or financial difficulties which forced them to leave postsecondary education without having reached that goal (Tinto, 1987). These non-completing leavers are generally considered to be dropouts. However, Tinto refers to these people not as dropouts, but as departures with possible later re-entry into the postsecondary system. This has a less negative tone, and as he further points out, these changes are often seen as positive by the person making them. If these people do return to postsecondary

education, they could then become baccalaureate completers, but as non-traditional students.

To persist is to reach a goal regardless of obstacles or setbacks. To progress is to proceed to a further or higher stage or through a series of successive stages. Thus, the concept of persistence and progress through postsecondary education does not exclude the non-traditional student, but rather includes all students who enter postsecondary education at any time regardless of personal goal. Most studies to date, at least on a national scale, have confined themselves to bachelor's degree completers, because they have been limited in that the data have not covered a long enough time period to allow re-entry and completion (Astin, 1975, 1977; Carroll, 1985, 1987).

Different types of postsecondary institutions provide different opportunities, encouragement, and support for the attainment of a postsecondary education. The majority of institutions that provide only programs of less than 4 years tend to expect the student to end his postsecondary career when the program is completed. Likewise, colleges offering full baccalaureate degree programs tend to expect the student to complete that program ultimately, even though they may also offer programs of lesser duration. While students entering a less-than-4-year school may obtain a bachelor's degree by transferring to a 4-year college, it is highly unlikely. For instance, studies have shown that even after controlling for differences between students who first enter 2-year colleges rather than 4-year colleges, those who entered the 2-year schools are still less likely to complete even the first 2 years. For those whose goal was a bachelor's degree, the chances of eventually attaining that degree is reduced by about 15 percent for those entering 2-year schools (Anderson, 1981; Breneman and Nelson, 1981; Astin, 1975). Thus, it is in the student's best interest to select the type of school where achieving the postsecondary goals in as timely a manner as possible is most likely.

Purpose and methods

This report will address the following questions related to persistence and progress.

* What is the average time taken to complete each level of postsecondary education through a bachelor's degree?

* How many students take longer than normally expected to progress through postsecondary education?

Because of the long time period covered (12 years after high school), data from the National Longitudinal Study of the High School Class of 1972 (NLS:72) student surveys and the Postsecondary Education Transcript Study (PETS), 1984 were used. The NLS:72 is comprised of a series of data collection efforts designed to help understand the experiences, efforts, and outcomes associated with education beyond high school. Data regarding postsecondary entry, progress, and completion was collected

from selected students beginning during their senior year in high school and at five points in time since then, as well as from the colleges they attended[1].

This report is based primarily on information obtained from postsecondary education transcripts through 1984. As a result, the definition of participation in postsecondary education (PSE) is limited to students who identified any postsecondary school which they attended at any time in the 1972-1984 period which did not deny their attendance[2]. Therefore, estimates of postsecondary attendance may be somewhat lower than reported elsewhere. The report itself is based only on those students for whom at least one transcript was obtained. This study provides a unique opportunity to look at postsecondary attendance over a long period (over 12 years) without having the problem of lowered completion rates due to delayed entry or non-normal persistence (anything other than full time for 4 consecutive years) which occurs when a shorter time period is used. Similarly, for those who departed from PSE and later re-entered, this time period allows many to re-enter who would not have done so in a shorter length of time. This report presents average length of time at each completed stage leading to the baccalaureate degree (hereafter referred to as a BA degree) and the proportion of students who exceed the normally expected time periods.

For purposes of this report, "academic progress" is the completion of each of four levels normally considered as leading to completion of the bachelor's degree:

1) the first year, or freshman level, normally requiring 30 semester hours,
2) the second year or sophomore level, requiring an additional 30 semester hours (60 hours total),
3) the third year or junior level, requiring an additional 30 semester hours (90 hours total), and
4) the final year or senior level, requiring sufficient additional credits to complete all requirements for the bachelor's degree.

Academic level is not part of a transcript record, and for many institutions, is a term with little meaning. However, it is used here for the convenience of defining a prescribed level of accomplishment regardless of the length of time taken to achieve it. The same standard for progress is applied to 2-year colleges and less than 2-year technical schools, even though they offer programs requiring less than 4 academic years, because it provides an indication of the time needed to achieve a certain level of

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[1] For a complete discussion of the NLS:72 and other longitudinal surveys conducted by NCES, see Jones et. al., National Longitudinal Study of the High School Class of 1972 Postsecondary Education Transcript Study Data File User's Manual, 1986, and Sebring et. al., High School and Beyond 1980 Senior Cohort Third Follow-Up (1986) Data File User's Manual, 1987.

[2] See Jones, et.al., 1986, for a complete description of who was considered eligible to remain in the PSE attenders file.

progress, not an evaluation of the progress achieved[3]. A student may very well have completed all of the requirements for the program at an appropriate time, received the appropriate credential, and left higher education at that time. This report looks at how much progress was made in PSE. The question of how much time it took is different from how much of the goal was accomplished. Indeed, many students who enter such schools do later go on and complete a BA level degree[4]. Because the issue is length of time to complete a given level or amount of education, it is important to know, for example, how much time was required by those who completed a full freshman year, regardless of program or degree attempted. All students who completed a particular level are included in that analyses, regardless of the level of postsecondary education ultimately attained. Thus, data for freshmen are based on all students who completed that level, while data for seniors are based only on those completing that final level.

Similarly, "persistence" is the length of time needed to achieve a given level of progress. Normal persistence is the time expected at each level for a typical student who first enters PSE in the fall term immediately after high school, attends full time for 4 years, and graduates in the spring 4 years after high school graduation. To fit this schedule, normal persistence is 9 months for completion of the freshman level, and an additional 12 months for each of the following three levels, resulting in completion 45 months after start.

Student background characteristics were taken from the base-year and first followup surveys, and are reflective of the student at the time he or she was a senior in high school. These characteristics have been found to be highly related to entry into and progress at the postsecondary level. Because many studies have already concentrated on such characteristics[5], this study will only look at sex, race, and SES as they relate to progress and persistence[6].

Postsecondary characteristics are descriptive characteristics based on information from or about the postsecondary institutions attended. These were developed by merging data from the NLS Institutional Data Base with the transcript data for each transcript in the PETS file. For a description of the Institutional Data Base, see

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[3] See Knepper, 1987 for a complete discussion of conversion of various credit systems to semester hours (credits).

[4] For a discussion of degree attainment, see Eagle et. al., National Longitudinal Study 1972, A Descriptive Summary of 1972 High School Seniors: Fourteen Years Later.

[5] Carroll, 1988; Eagle et. at., 1988; Wagenaar, 1987; Astin, 1975,1977; Terenzini, 1977.

[6] For a complete discussion of these variables, see Riccobono, et. al., 1981.

Tenison, 1976. For a description of how the postsecondary variables used were created, see Appendix A.

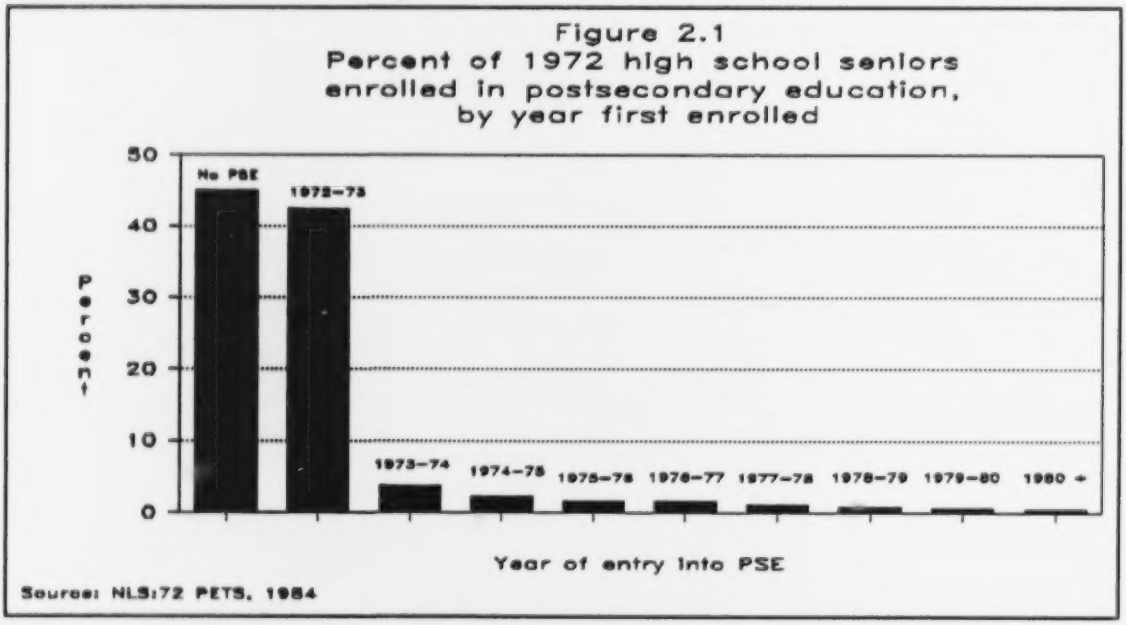
Organization of this report

Section 2 will provide basic information on the entry, progress, and completion rates for the 1972 high school class. Section 3 will provide more detailed information on length of time taken at each level, by both student background characteristics, and by postsecondary characteristics. Section 4 provides information on the number of persisting students taking longer than normally expected at each level. Section 5 provides a brief discussion of the findings. Appendix A provides information on methodological issues and data reliability. Appendix B provides the actual figures and standard errors for all variables used in the analyses and figures presented in the text.

2. Entry and Progress

Based on information obtained from postsecondary education transcripts, the majority of the 1972 high school seniors went on to enter some form of postsecondary education within 12 years after high school. The largest group (42 percent) started in the first year after high school, and another 8 percent started within 4 years after high school. Only 5 percent of the high school seniors first entered postsecondary education more than 4 years after high school (Figure 2.1).

Figure 2.1
Percent of 1972 high school seniors enrolled in postsecondary education, by year first enrolled

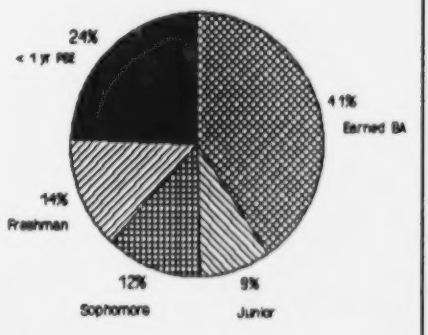


Transcripts indicated that for all who had enrolled in postsecondary education, about two-fifths (41 percent) received a BA degree or higher by 1984. Among the 60 percent not receiving a BA degree, 24 percent completed less than a full year of study, another 26 percent completed 1 or 2 years of study (the freshman and sophomore levels), and 9 percent completed 3 full years of study (through the junior level), as seen in Figure 2.2. Of those who received a BA degree, men were somewhat more likely to do so than women (42 percent versus 39 percent, $t=3.22$, $\alpha<.01$).

Minority students were the most likely to complete less than a full year, although their drop-off rates were not much different from whites once they had completed that full year (Figure 2.3). Whites were most likely to receive a bachelor's degree (43 percent). Blacks and other minorities did not differ significantly overall in their persistence patterns, with about 28 percent completing the BA ($t=7.46$, $\alpha<.001$).

Not surprisingly, low SES students were most likely to complete less than a year of PSE over the 12 year period. Over half (52 percent) completed one year or less, while only 26 percent received a bachelor's degree. On the other hand, the reverse was true of the high SES student. Only 26 percent failed to complete at least 2 years, while 55 percent persisted fully to obtain a bachelor's degree (Figure 2.4).

Figure 2.2
Percent of 1972 high school seniors in postsecondary education, by highest level completed



Source: NLS:72 PETS, 1984

As shown in Figure 2.1, the majority of 1972 high school seniors who entered PSE by 1984 did so in the first year after high school. In fact, of those who entered, 76.7 percent did so in the first year, 11.7 percent did so in the next 2 years, and 11.7 percent first entered more than 3 years after high school.

Those who did not enter PSE within the first year after high school were most likely to complete less than 1 year. Over two-fifths of those who entered PSE 2 or 3 years after high school completed less than 1 year and over half (56 percent) of those who entered more than 3 years after high school failed to complete even a full year (Figure 2.5). Similarly, those who entered PSE more than a year after high school were less likely to earn a bachelor's degree than those who entered earlier. For those who entered PSE within the first year after high school, 48 percent earned a bachelor's degree. For those who entered 2 or 3 years after high school, only 21 percent received a BA degree, and for those waiting longer than 3 years to start, only 12 percent received the BA degree.

Figure 2.3
Percent of 1972 high school seniors in postsecondary education, by highest level completed and race

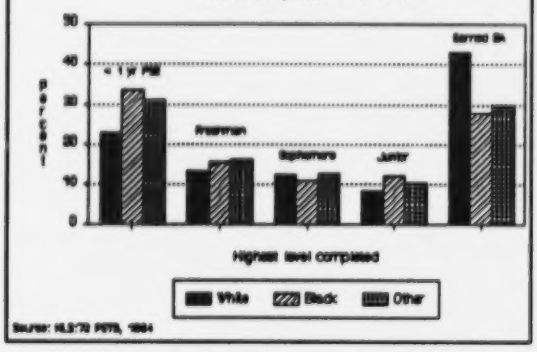


Figure 2.4
Percent of 1972 high school seniors in postsecondary education, by highest level completed and SES

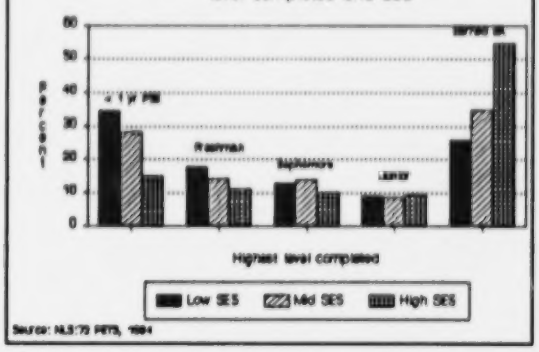


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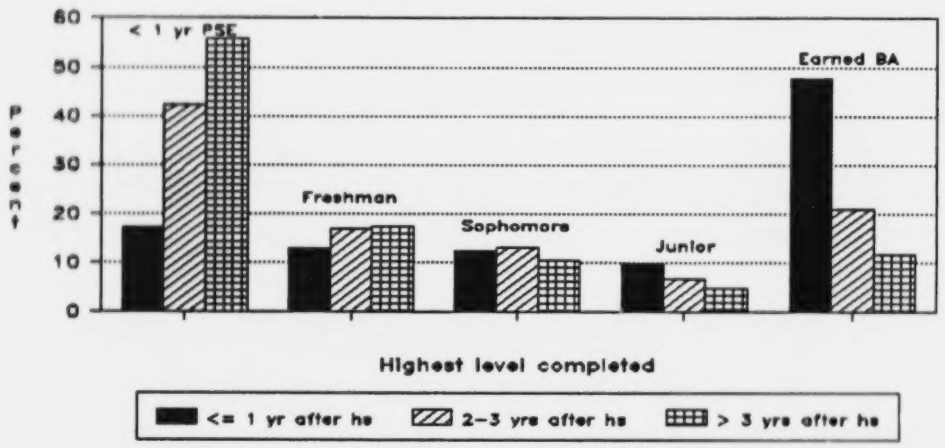
Figure 2.5
Highest level of postsecondary education completed, by time of entry

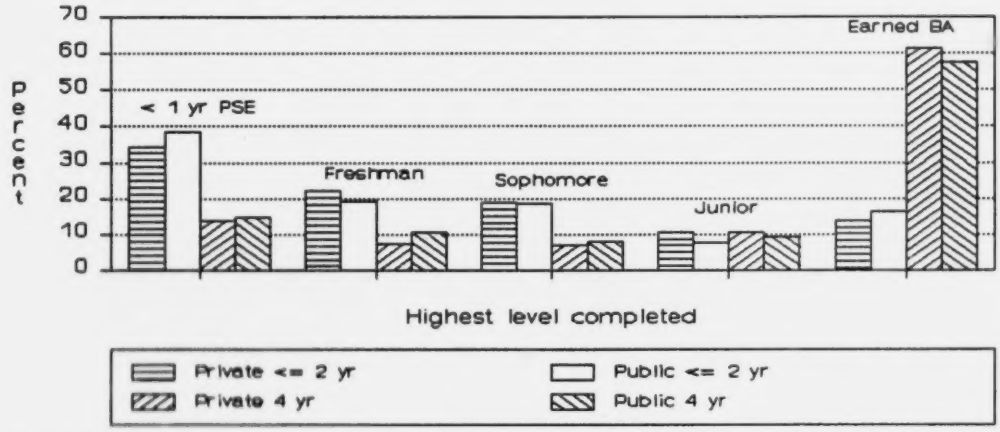


Source: NLS:72 PETS, 1984

Persistence and progress was related to the institution first attended. Over a third of those who entered 1- or 2-year schools left PSE before completing a full year, regardless of whether the institution was public or private (Figure 2.6). Only about 15 percent of those entering 4-year schools did not complete at least the first year. The majority of students who entered 4-year colleges were successful in completing the bachelor's degree (62 percent in private and 58 percent in public colleges). Although many of those who first entered 1- or 2-year schools may not have intended to earn a BA, about 15 percent went on to do so anyway.

Another factor which affected persistence and progress was whether or not a student changed colleges during the process of working toward a BA degree. Transcripts indicated that 71 percent of all entrants to PSE attended only one institution as an undergraduate. Another 9 percent attended multiple institutions but made no level or control changes. This could result from either actually transferring from, e.g., one public 2-year college to a public 2-year college in an unrelated system or from one private 4-year to another as typically envisioned, or through selective movement within a system or consortium of colleges which encourage movement between campuses to accomplish program goals. In many cases, movement between campuses within a system is encouraged in order to reduce the need for multiple sites for a small or limited interest program. Similarly, a number of private colleges belong to consortiums, providing much more flexibility in available programs. Table 2.1 shows the transfer rates for selected types of changes. Figure 2.7 shows the BA completion rates for students making various types of transfers. As can be seen, over 60 percent of the students who transferred to 4-year colleges did receive a BA degree, about the same as for those who first entered 4-year colleges. The act of transferring to a 4-year college in itself did not appear to inhibit degree completion.

Figure 2.6
Highest level of postsecondary education completed, by type of first school

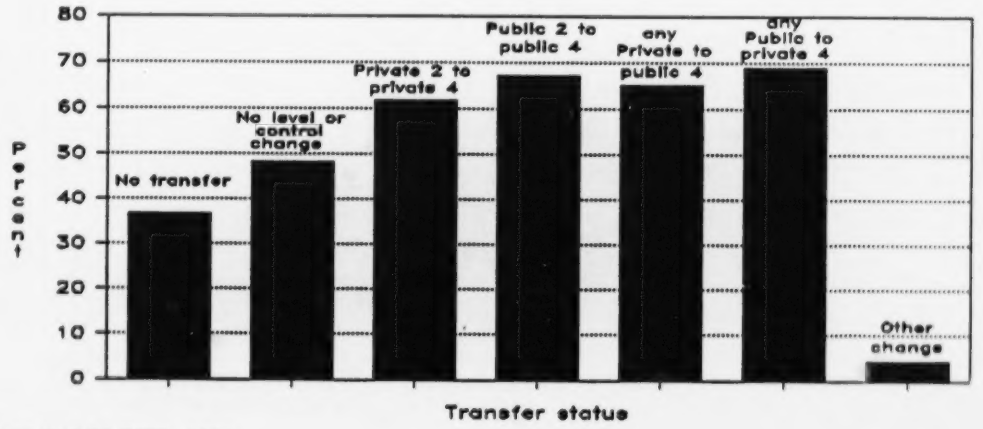


Source: NLS:72 PETS, 1984

Table 2.1. Student transfer rates, by type of institutional transfer.

Type of transfer	Percent
No transfer or change	71.3
No level or control change	9.3
Private 2-year to private 4-year	0.3
Public 2-year to public 4-year	7.2
Any private to public 4-year	3.6
Any public to private 4-year	3.2
Other change	5.1

Figure 2.7
Percent completing a BA,
by transfer status



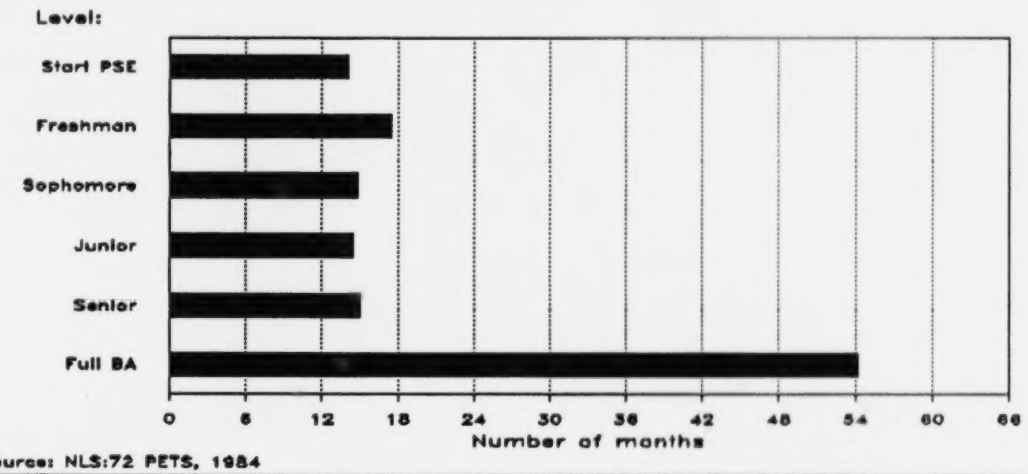
Source: NLS:72 PETS, 1984

3. What Is the Average Time Taken to Complete Each Level of Postsecondary Education Through a Bachelor's Degree?

For the 75 percent of PSE entrants who completed a year or more of college, it is not enough to know only how far they progressed. Some students go straight through college, some either start late or go part time, and still others stop out periodically throughout their PSE career. Thus, "longer than normally expected" suggests delay due to lack of full time attendance or failure to keep up the expected schedule of credit completion for the first three levels, each of which by the definition used in this study requires a prescribed number of credits (30). For the senior level, however, completion is not counted until all BA degree requirements are met. Therefore, "longer than normally expected" in the senior year could mean the same as at earlier levels, or it could also mean additional credits had to be completed in order to meet specific degree requirements. This section will look at how long it took, on average, to progress through each of the levels of PSE. Section 4 will look at the proportion of students taking longer than normally expected[7].

Students entering PSE spent 18 months on average (twice as long as normally expected) to complete the freshman year (30 semester credits) and about 15 months

Figure 3.1
Average time needed to complete each level of postsecondary education



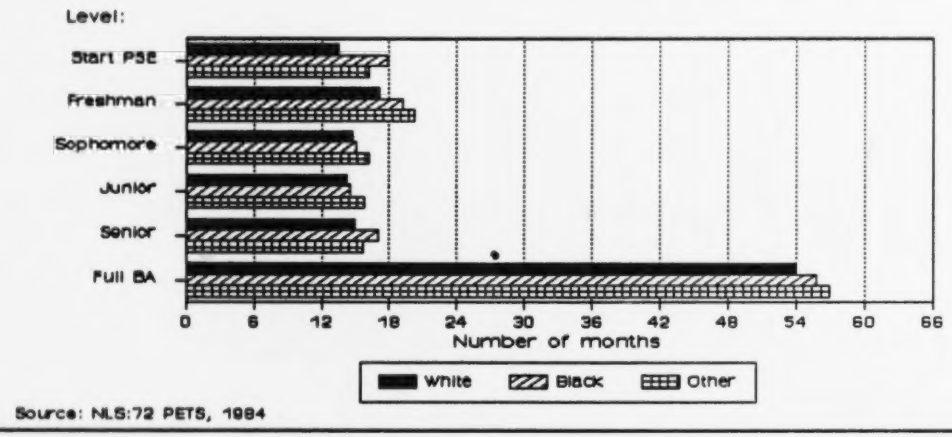
Source: NLS:72 PETS, 1984

[7] Normal time is 3 months to start, 9 months for the freshman year, and 12 months for each of the next three years, with a degree completed in 45 months from start, or four years after leaving high school.

(rather than the expected 12 months) to complete each of the next 3 years (Figure 3.1). Average time to complete a BA was 54 months or 4 1/2 years from the time they started. This was almost a full academic year (9 months) more than considered normal. Men took about one term longer (56 months) than did women (53 months) to complete the BA degree ($t=4.66$, $\alpha<.001$).

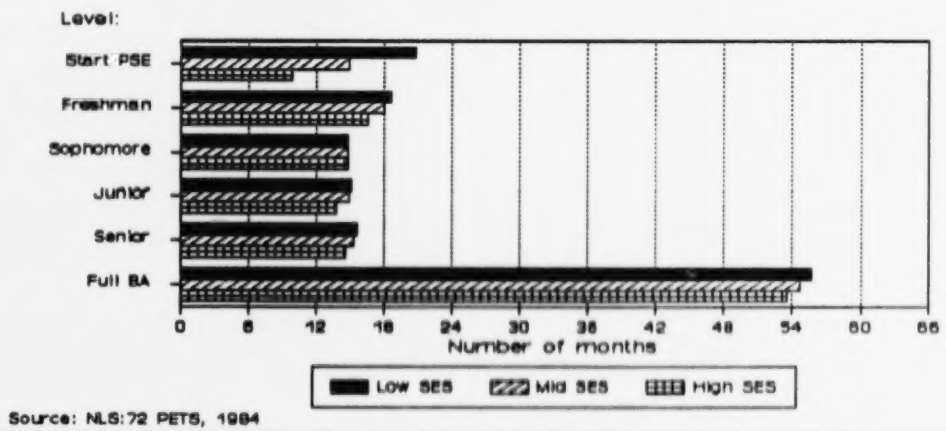
While there was very little difference in overall completion times by race, as shown in Figure 3.2, minorities took somewhat longer to start and to complete the freshman year. Students from a low SES background delayed entry into PSE the longest (Figure 3.3). They entered PSE 21 months after high school on average, while those

Figure 3.2
Average time needed to complete each level of postsecondary education, by race



Source: NLS:72 PETS, 1984

Figure 3.3
Average time needed to complete each level of postsecondary education, by SES



Source: NLS:72 PETS, 1984

who delayed next longest, middle SES students, entered in 15 months ($t=4.95$, $\alpha<.001$). Once started, there was very little overall difference in completion times among the SES groups.

Students who first entered PSE within a year of high school took less time to complete the freshman year than did those who started later (17 months versus 23 months, $t=6.77$, $\alpha<.001$). However, there was no significant difference in time to complete the BA. Thus, late starters took no longer overall than did their more promptly entering classmates (Figure 3.4).

Students who entered 4-year schools, either public or private, entered much sooner on average than those entering 2-year schools. Students who entered 4-year colleges did so within 9 months after high school, while those who entered public schools with programs of 2 years or less waited 19 months (over 1 1/2 years after high school), and those who entered private schools with programs of 2 years or less on average entered 34 months (almost 3 years) after high school (Figure 3.5).

Those who did not receive a BA took longer at each PSE level (Figure 3.6). In fact, those students who did not go on to the next level took longest at each level. This suggests that taking a longer time to complete a level may discourage continuation. There could, of course, be many reasons for the extra time needed, ranging from family responsibilities or the need to work to poor academic ability.

Students who did not transfer or attend multiple colleges completed the BA in somewhat less time than did those who transferred (51 months versus 59 months or longer, $t=7.34$, $\alpha<.001$, Figure 3.7). Thus, while transferring does not reduce the likelihood of degree attainment, it does increase the length of time by almost a year.

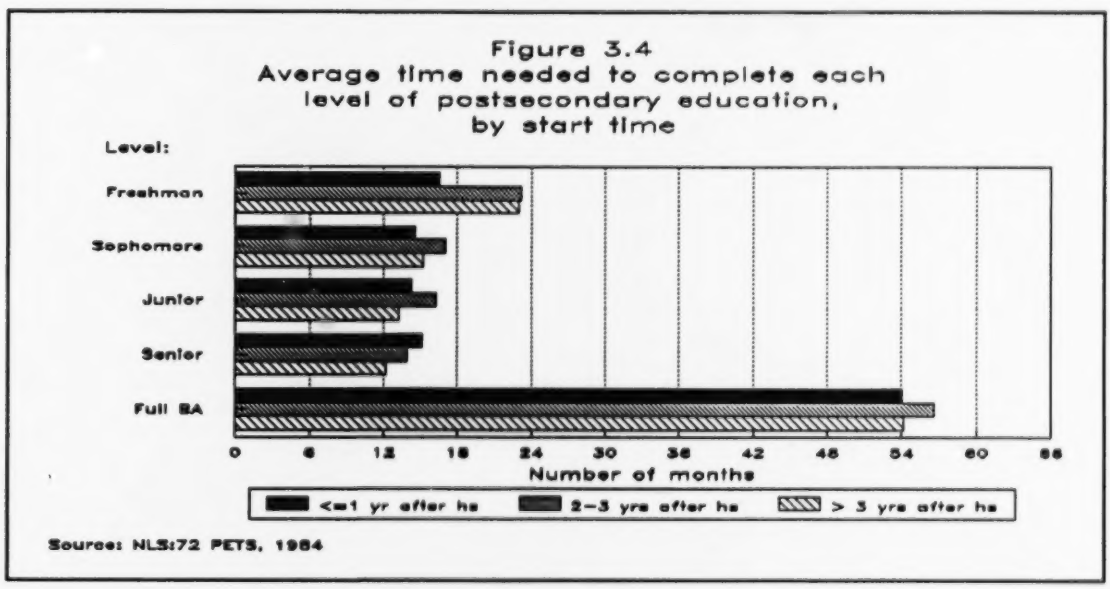
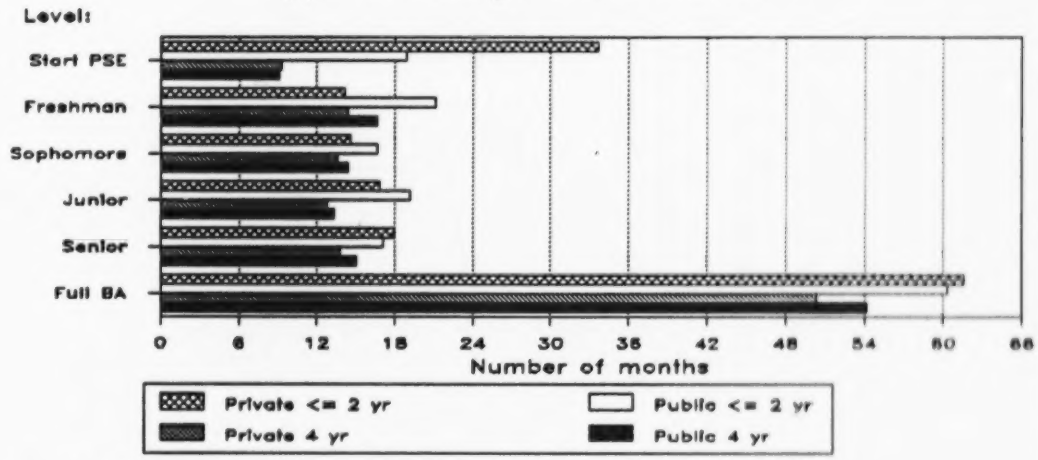
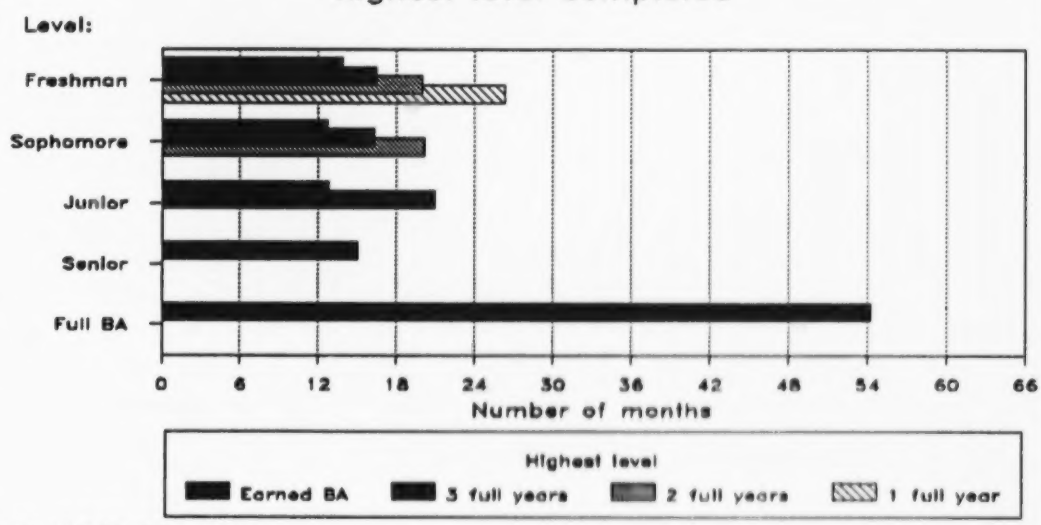


Figure 3.5
Average time needed to complete each level of postsecondary educaton, by type of college where started



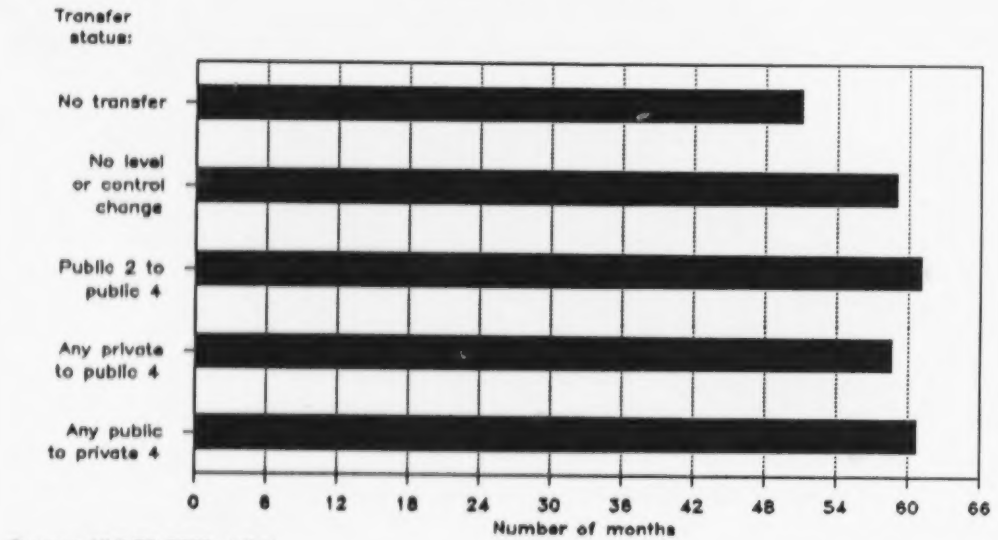
Source: NLS:72 PETS, 1984

Figure 3.6
Average time needed to complete each level of postsecondary education, by highest level completed



Source: NLS:72 PETS, 1984

Figure 3.7
Average time needed to earn BA,
by transfer status

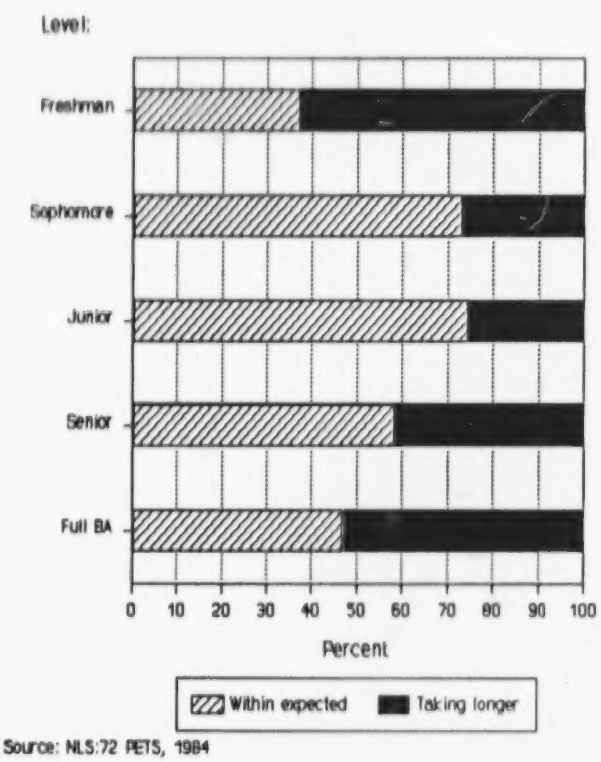


Source: NLS:72 PETS, 1984

4. How Many Students Take Longer than Normally Expected to Progress Through Postsecondary Education?

Less than half (47 percent) of the BA degrees earned were completed in the expected normal time (within 4 years after high school). The freshman level seemed to be the most difficult for students to complete on time. Only about one-third (37 percent) of those who completed the freshman level did so in the normally expected (9 months or less) time (Figure 4.1). The sophomore and junior years did not seem to be so troublesome, as almost three-quarters of the students finished in the normally expected time. Almost three-fifths of those completing the senior year did so within the expected 12 months. Lack of full time attendance or failure to keep up academically account for the delays at the lower levels. At the senior level, this delay may have also been due to additional credit requirements for some programs or needing to make up previous credits which had not transfered with the student.

Figure 4.1
Percent in postsecondary education spending the expected time vs. longer at each level



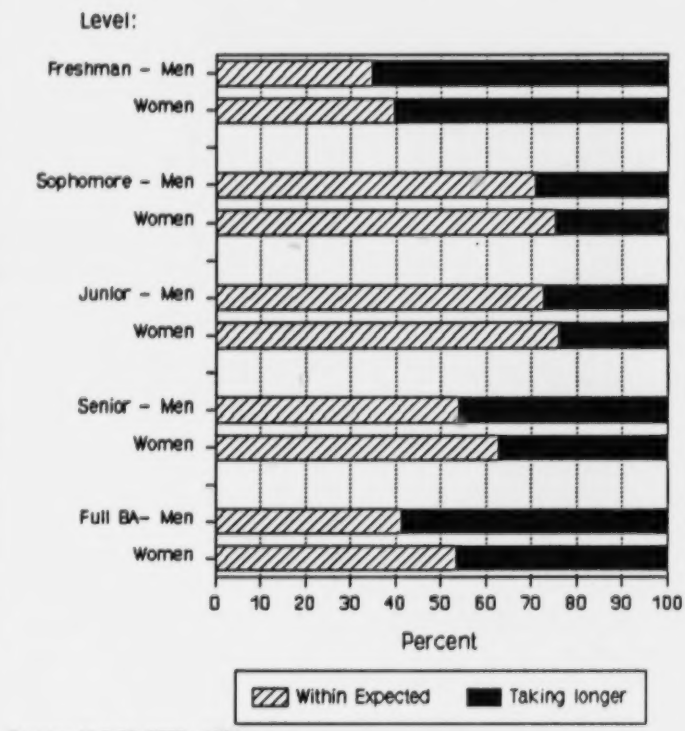
Source: NLS:72 PETS, 1984

Men more often took longer than normally expected at all levels than did women (Figure 4.2). Almost three-fifths of the men took longer than normally expected to complete the BA while less than half (47 percent) of the women took longer ($t=6.24$, $\alpha<.001$). Again, in the earlier years, this could be related to time in attendance or academic achievement. In the senior year, this may additionally have

involved a program difference, with men perhaps having transferred colleges more often or been in programs which required more course work.

Minority students were more likely to have taken longer than were whites (Figure 4.3). About three-quarters of all minority students took longer than normally expected to complete the freshman year, while only three-fifths of the whites took longer than normally expected for the freshman year ($t=6.46$, $\alpha<.001$). Minorities classified as "other" were most likely to take longer than normally expected to complete a BA.

Figure 4.2
Percent in postsecondary education spending the expected time vs. longer at each level, by sex

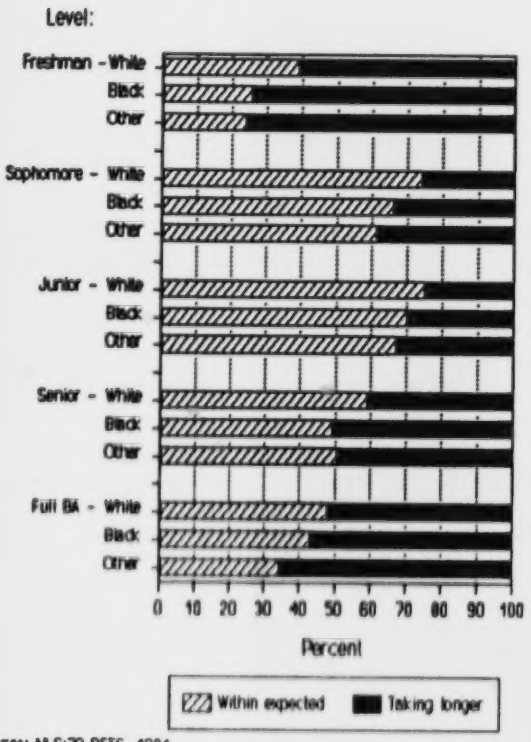


Source: NLS:72 PETS, 1984

Low SES people were somewhat more likely to take longer than normally expected at each level, Figure 4.4, perhaps because of having to work while attending college.

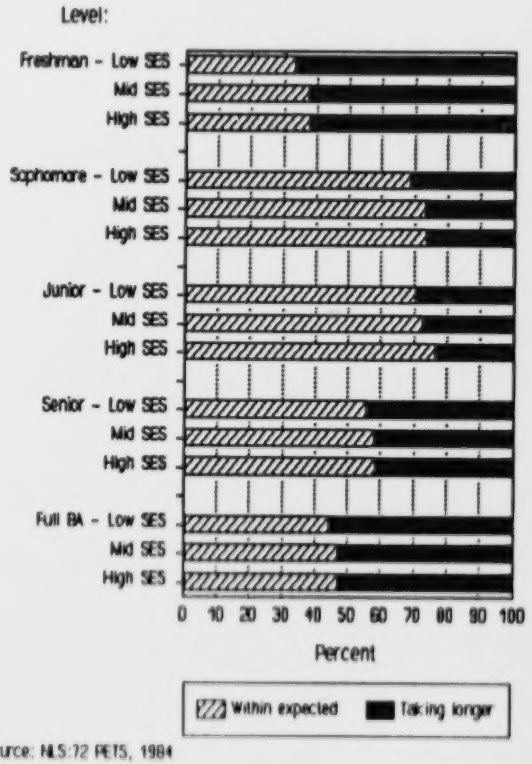
Those who started PSE within the first year after high school were more likely to have completed the freshman level in the normally expected length of time than were those who started later (only 61 percent took longer versus over 72 percent of the later starters, $t=6.42$, $\alpha<.001$). Interestingly, there was no significant difference in the proportions taking longer to complete the entire BA program (Figure 4.5). Thus, late starters appear to be more hesitant to return to academics after being away from school for over a year, perhaps because of academic or financial problems. Once the freshman level had been achieved, however, they were no more likely to extend the overall time than were prompt starters.

Figure 4.3
Percent in postsecondary education spending the expected time vs. longer at each level, by race



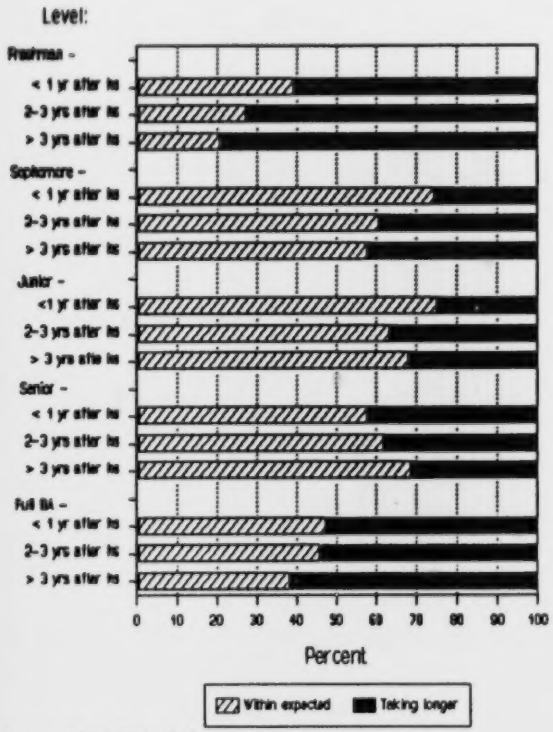
Source: NLS:72 PETS, 1984

Figure 4.4
Percent in postsecondary education spending the expected time vs. longer at each level, by SES



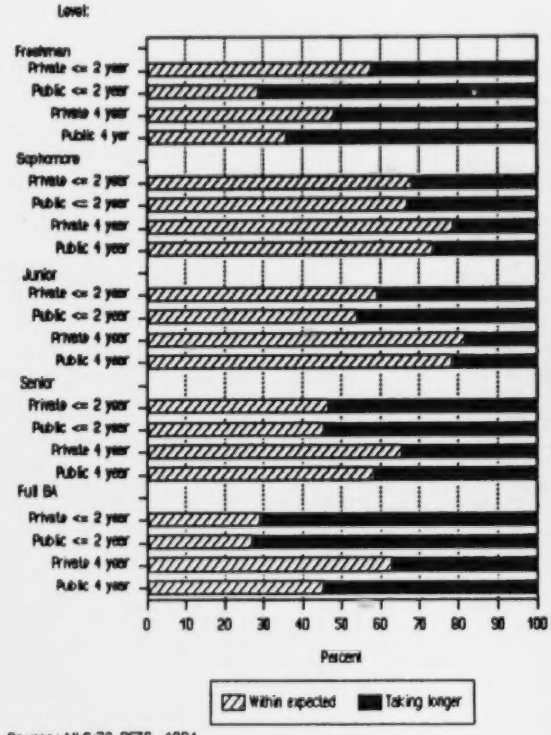
Source: NLS:72 PETS, 1984

Figure 4.5
Percent of students spending the expected time vs. longer at each level, by when started postsecondary education



Source: NLS:72 PETS, 1984

Figure 4.6
Percent of students spending the expected time vs. longer at each level, by type of college where started



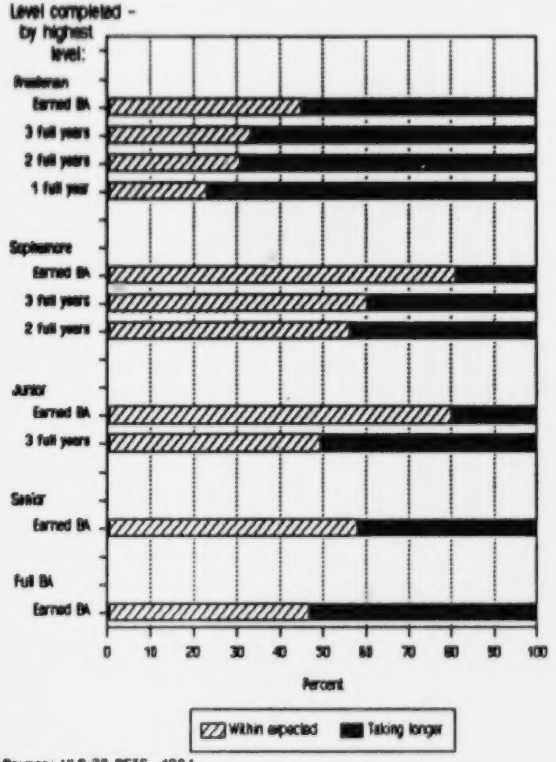
Source: NLS:72 PETS, 1984

Only in private schools offering programs of 2 years or less did over half of the students finish the freshman level requirements in the normally expected time (58 percent, Figure 4.6). Those who started in similar public institutions were least likely to finish the freshman level in the normally expected length of time (29 percent). Those who entered private 4-year colleges were most likely to finish the BA on time (63 percent).

Figure 4.7 shows that those who left PSE before obtaining a BA were most likely to take longer at each level than those who did complete a BA. Though 55 percent of those who completed a BA took longer than normally expected at the freshman level, two-thirds or more of those who completed less than a BA took longer than normally expected ($t=8.92$, $\alpha<.001$). Similarly, those who did not earn a BA were more likely to take longer at both the sophomore ($t=12.61$, $\alpha<.001$) and junior ($t=15.69$, $\alpha<.001$) levels. It should be kept in mind that at these levels, longer does in fact represent only a time delay due to intensity of study, not a delay related to additional or final requirements for program completion.

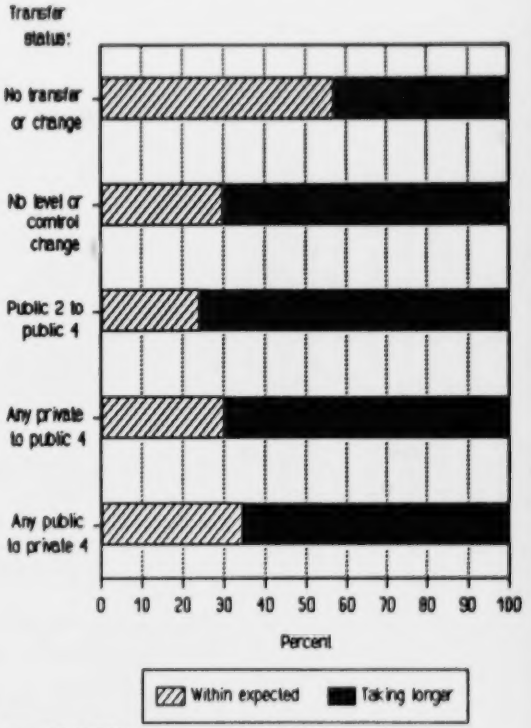
The longer delay seen at the junior year in Figure 4.6 for students who started at schools which offered programs of 2 years or less could be due to college transfer, since those who earned a BA and had changed colleges did take longer overall. As Figure 4.8 shows, for those who received a BA, transferring from one college to another did increase the percent who took longer than normally expected. Only 43 percent of those remaining in the same institution took longer than normally expected to finish, while over 65 percent of those who transferred took longer ($t=8.90$, $\alpha<.001$), depending on the type of transfer.

Figure 4.7
Percent of students spending the expected time vs. longer for each level, by how much postsecondary education completed



Source: NLS:72 PETS, 1984

Figure 4.8
Percent spending the expected time vs. longer who completed a BA, by transfer status


Transfer status:
No transfer or change
No level or control change
Public 2 to public 4
Any private to public 4
Any public to private 4
0 10 20 30 40 50 60 70 80 90 100
Percent
Within expected
Taking longer

Source: NLS:72 PETS, 1984

5. Discussion

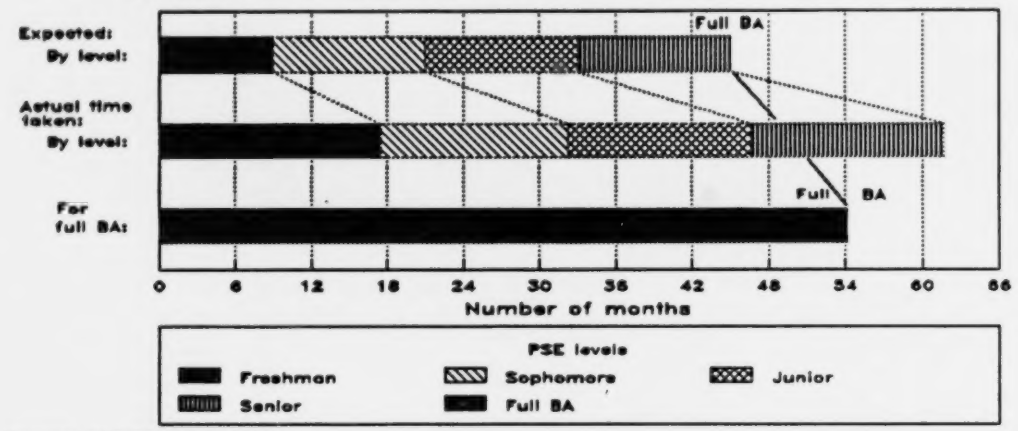
Non-traditional students are increasingly common in postsecondary education. While many students in the high school class of 1972 did enter PSE within the first year after high school, many did not necessarily intend to earn a BA. Even if they did earn a BA, many did not do so in the time expected. Those who entered later were even less likely to earn a BA, often leaving PSE without even a full year of study. For the late entrants who did earn a BA, however, extra time was not required for its completion any more often than for normal starters. This suggests that the distinction between the traditional and non-traditional student should not be the sole concern to higher education, but rather how to best help all students gain the level of postsecondary education they want and need.

Background variables such as race and sex are related to PSE persistence and progress, but not as much as the postsecondary experiences associated with that education--that is, the type of PSE institution first entered and the associated opportunity to succeed. Normal time expectations have been artificially set which reflect an optimistic schedule for completion rather than a normative one. The optimistic expectation is that the student gets through college in a minimum amount of time (and consequently for a minimum amount of money) so that he can fully enter the labor force and be economically productive. Realistically, not meeting this expectation may be discouraging to students who do require more time.

Traditional time expectations are shorter by 3 to 9 months than what was actually spent by 1972 high school seniors, depending on level (Figure 5.1). The freshman and senior levels were particularly prone to delay. However, the delays at each level were not cumulative. Overall BA completion took about 8 months longer than expected, and over half of all completers took longer than the expected 45 months from start to finish. A quarter of those who entered PSE completed less than a full year of study. Those who completed a year or more but did not complete a BA took longer at every level than those who ultimately completed a BA. This group also took longer for their last full year of attendance than did those who were continuing. For those who did not complete a BA, the chance of completion of any level within the expected time was reduced by over 25 percent for the freshman year and by 30 percent or more for the sophomore year, depending on how far they actually progressed. It seems that prompt completion of each level encourages progress to and through the next, while delay encourages discontinuation. This suggests that it is in the best interest of the student to promptly progress from level to level in the attainment of the educational goal rather than delay.

As would be expected, students who entered 4-year colleges were more traditional than those who entered schools with shorter programs. They were most likely to first start PSE within less than a year after high school, and about 60 percent earned the BA. Private 4-year colleges were most likely to have students finishing within the expected time (over 60 percent), while less than half (45 percent) of those who entered public colleges completed the BA in the expected time. To put that another way, those students entering a private 4-year college had a 33 percent better chance to finish the BA on time than did those who entered a similar public college.

Figure 5.1
Comparison of expected completion times
for each level of postsecondary
education with time taken by 1972 high school seniors



Source: NLS:72 PETS, 1984

The late-starting student was most likely to enter schools with programs of 2 years or less. Those who entered public schools of this type did so on average over 1 1/2 years after high school, and those who entered similar private schools had an average entry time of almost 3 years after high school. About a third of those students entering less than 4-year schools did not finish a full freshman year. However, for those who did finish at least one full year, almost 60 percent of those in private less-than-4-year schools finished that year in the expected time, while less than 30 percent of those in similar public colleges did so. If completing a program in a timely, efficient manor is important, the chances of doing this are twice as good in the private institution.

Less than a third of all BA recipients attended more than one college while working toward that degree, but for those who did, the likelihood of completion showed a 30 to over 70 percent increase, depending on the type of transfer. Those who transferred to a 4-year college rather than attending multiple colleges at the same level and control had the best chances of completion. However, there was a cost associated with transferring in that extra time was required. The chances of completing the degree within the optimum time dropped 40 to 60 percent, and required an increase in time of 14 months or longer.

Many students who enter PSE do not complete a full academic year. This study did not attempt to determine whether this was planned or was a result of the PSE experience. For those who did complete a full year or more, prompt completion appears to have contributed to continuing to the next desired level. Many students experienced delay at either the freshman level or at the senior level. Those who continued, however, did not seem to experience significant delays at multiple levels. Some institutions encourage prompt completion more than do others. While it may be

argued that flexibility in completion time is needed for some students, particularly non-traditional students, it also appears that this flexibility presents a potential hazard in the form of discouraging continuation. Only the delay associated with transfer appears to not discourage completion. This may be related more to the determination of the student who chose to take on the additional effort associated with transferring colleges rather than anything regarding the change itself. Prompt completion of each level and steady progress appear to most encourage continuation and completion in PSE.

References

References

Anderson, Kenneth L. "Post high school experiences and college attrition" in Sociology of Education, Vol. 54, 1981.

Astin, Alexander W. Four Critical Years. San Francisco: Jossey-Bass Publishers, 1977.

Astin, Alexander W. Preventing Students from Dropping Out. San Francisco: Jossey-Bass Publishers, 1975.

Astin, Alexander W. College Dropouts: A National Profile, American Council on Education Research Reports. Washington D.C.: American Council on Education, 1972.

Breneman, David and Susan Nelson. Financing Community College: An Economic Perspective. Washington D.C.: Brookings Institute, 1981

Burkheimer, Graham J., and T. P. Novak. A Capsule Description of Young Adults Seven and One-half Years After High School. Washington D.C.: U.S. Department of Education, National Center for Education Statistics, 1981.

Campbell, R.T. "The Freshman Class of the University of Wisconsin, 1964" in Longitudinal Perspectives on Educational Attainment, edited by A. Kerckhoff. Greenwich, Conn.: JAI Press, 1980.

Carroll, C. Dennis. Postsecondary Status and Persistence of High School Graduates of 1980. Washington D.C.: U.S. Government Printing Office for U.S. Department of Education, National Center for Education Statistics, 1985.

Carroll, C. Dennis. Student Financial Assistance and College Persistence and Completion. Paper presented at National Association of State Scholarship And Grant Programs Annual Meeting, September 1987.

Carroll, C. Dennis. Bulletin: Enrollment in Postsecondary Education by 1980 and 1982 High School Graduates. Washington D.C.: U.S. Department of Education, National Center for Education Statistics, July, 1988.

Eagle, Eva, Robert A. Fitzgerald, Antoinette Gifford, and John Zuma. High School and Beyond. A Descriptive Summary of 1980 High School Seniors: Six Years Later. Washington D.C.: U.S. Department of Education, National Center for Education Statistics, 1988.

Eagle, Eva, Robert A. Fitzgerald, Antoinette Gifford, and John Zuma. High School and Beyond. A Descriptive Summary of 1980 High School Sophomores: Six Years Later. Washington D.C.: U.S. Department of Education, National Center for Education Statistics, 1988.

Eagle, Eva, Robert A. Fitzgerald, Antoinette Gifford, and John Zuma. National Longitudinal Study 1972. A Descriptive Summary of 1972 High School Seniors: Fourteen Years Later. Washington D.C.: U.S. Department of Education, National Center for Education Statistics, 1988.

Eckland, B.K. "College dropouts who came back" in Harvard Educational Review, Vol. 34, 1964.

Frances, Carol. College Enrollment Trends: Testing the Conventional Wisdom Against the Facts. Washington D.C.: Association Council for Policy Analysis and Research, American council on Education, 1980.

Hill, Susan. OERI Bulletin: Completion Time for Bachelor's Degrees. Washington D.C.: U.S. Department of Education, National Center for Education Statistics, November, 1986.

Jones, Calvin, Reginald Baker, and Robert Borchers. National Longitudinal Study of the High School Class of 1972 Postsecondary Education Transcript Study Data File User's Manual. Washington D. C.: U.S. Department of Education, National Center for Education Statistics, 1986.

Knepper, Paula R. Addendum to NLS-72 Postsecondary Education Transcript File Data User's Manual for Revised and Reduced Student, Transcript, Term, and Course Files. Washington D. C.: U.S. Department of Education, National Center for Education Statistics, 1987.

Korb, Roslyn, Nancy Schantz, Peter Stowe, and Linda Zimbler. Undergraduate Financing of Postsecondary Education: A Report of the 1987 National Postsecondary Student Aid Study. Washington D.C.: U.S. Department of Education, National Center for Education Statistics, 1988.

Lavin, D. E., J. Murtha, and B. Kaufman. Long term graduation rates of students at the City University of New York. New York: City University of New York, Office of Institutional Research and Analysis, 1984.

Riccobono, J., Louise B. Henderson, Graham J. Burkheimer, Carol Place, and Jay R. Levinsohn. National Longitudinal Study: Base Year (1972) through Fourth Followup (1979) Data File User's Manual. Washington D.C.: U.S. Department of Education, National Center for Education Statistics, 1981.

Sebring, Penny, Barbara Campbell, Martin Glusberg, Bruce Spencer, and Melody Singleton. High School and Beyond 1980 Senior Cohort Third Followup (1986) Data File User's Manual. Washington D.C.: U.S. Department of Education, National Center for Education Statistics, 1987.

Tenison, Laurence J. Description and Specifications for the NLS-Institutional Data Base, National longitudinal Study of the High School Class of 1972, A Technical Report. Washington D.C.: College Entrance Examination Board, 1976.

Terenzini, Patrick T. and Earnest T. Pascarella. "Voluntary Freshman Attrition and Patterns of Social and Academic Integration in a University: A Test of a Conceptual Model", Research in Higher Education, 1977, Vol. 6.

Tinto, Vincent. Leaving College - Rethinking the Causes and Cures of Student Attrition. University of Chicago Press, 1987.

U.S. Department of Education, National Center for Education Statistics. Pocket Projections 1977-78 to 1997-98. Washington D.C.: 1988.

Wagenaar, Theodore C. Changes in Postsecondary Educational Choices: 1972 to 1980. Washington D.C.: U.S. Department of Education, Center for Education Statistics, 1987.

Westervelt, Ester Manning. Barriers to Women's Participation in Postsecondary Education: A Review of Research and Commentary as of 1973-74. Washington D.C.: U.S. DHEW, National Center for Education Statistics, 1975.

Appendix A.

Methodology and Technical Notes

Methodology

The National Longitudinal Study of the High School Class of 1972 (NLS-72) is the first of a series of ongoing national longitudinal studies conducted by the U.S. Department of Education's National Center for Education Statistics. This study collected comprehensive base year data from a nationally representative sample of high school seniors in the spring of 1972. These students were contacted again in the early part of 1974, 1976, 1979, and most recently, 1986. In addition to these four followup studies, a number of supplemental data collection efforts were undertaken. One of these, the Postsecondary Education Transcript Study (PETS), undertaken in 1984, identified students who indicated some postsecondary attendance at any time in any of the four followup surveys. Transcripts were requested from all postsecondary institutions identified by each of these students. The timing of this study, 12 years after high school, provides a unique opportunity to study not only postsecondary attainment, but also delay patterns in that attainment. Information concerning study design, variable definitions, non-response rates, and other technical topics for the student surveys can be found in National Longitudinal Study: Base Year (1972) through Fourth Followup (1979) Data File User's Manual. Similar information concerning PETS data can be found in National Longitudinal Study of the High School Class of 1972 Postsecondary Education Transcript Study Data File User's Manual and in Addendum to NLS-72 Postsecondary Education Transcript File Data User's Manual for Revised and Reduced Student, Transcript, Term, and Course Files.

The estimates presented in this report were based on data for the 11,607 NLS:72 seniors who had at least one transcript in the PETS file with sufficient data to support the analysis. Data used in this study were primarily taken from postsecondary transcripts, including the definition of postsecondary attendance. No self-reported information on postsecondary education (PSE) attendance was used in these analyses. As a result, estimates of the number of students participating in postsecondary education at some point in the 12 years after leaving high school may be somewhat lower than reported elsewhere. All information concerning postsecondary attendance was calculated using the PETS weight WT3 which was adjusted for the presence of transcript data and the presence of the composite variables sex, race, and SES from the base year and followup studies[8].

Because of the unique nature of college transcripts, many inconsistencies exist in the data which may affect the estimates reported. Missing dates for specific terms and degree completion were one such problem in determining length of time required to complete a given level. Similarly, for students who transferred during the undergraduate period, one or more transcripts may have been missing, so that time and credits could not be calculated accurately. A third problem involved schools which did not give semester-type credits. This could have been in two forms: clock hour credit as is often

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[8] For a complete description of the sampling and weighting procedures, see the PETS User's Guide referenced above.

used by proprietary schools; and no variable credit for each course but rather credit simply for completion of the course, reflected as either zero or one credit. A complete discussion of how these problems were handled is presented in the Addendum to the PETS user's guide mentioned earlier. A fourth problem was that of missing transcripts. For students who had not completed a bachelor's (BA) degree, it is often not possible to determine whether a transcript was missing or not, or if there was one known to be missing, whether it was for an earlier or later period of attendance. For these students, period of attendance was taken as that for which transcripts were available. Similar problems existed for BA recipients. However, in conjunction with additional information concerning the number of undergraduate credits completed, these students were treated somewhat differently. If the number of credits recorded was less than sufficient to support the award of a BA (less than 91 credits, the minimum defined as beginning the fourth year of study), the student was dropped from the analyses based on the assumption that at least one earlier transcript was missing, regardless of whether or not the file contained information indicating a missing transcript. An earlier transcript missing, particularly for BA completers, would have resulted in the miscalculation of length of time at all levels. The loss of data from these and other missing or incomplete information reduced the available sample from 12,504 to the 11,607 students in the analysis file.

PSE computed variables

All PSE variables computed for these analyses are described below. Following the descriptions, Table A-1 contains the weighted distributions of the background and postsecondary characteristics for the PSE student sample used in these analyses.

When PSE started: This was calculated for each student from the start date of the earliest term on record in the PETS file. For determining time from high school, students were assumed to have graduated in June, 1972, and dates were calculated from that point in time. Thus, within one year after high school includes the time between June, 1972 through May, 1973, two to three years includes June, 1973 through May, 1975, and over three years includes June, 1975 or later.

Level of PSE attained: Level attained was calculated from semester credits[9] received for all non-transfer courses taken during terms dated before a BA or higher degree was recorded. All credits recorded after the BA date were considered graduate credits and not included. Thus, cumulative credits totaling less than 30 were considered less than 1 year PSE, credits totaling 30-59 were considered 1 full year, 60-89 were considered 2 full years, 90 and higher with no BA was 3 full years. BA completion required the recording of the degree in the PETS file.

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[9] See addendum to the PETS user's guide for a discussion of credit conversion.

Time at each level: Time was calculated as number of months from the start date of each level to the first month after the end of the term in which the required number of credits was completed. For instance, if a student who started in September, 1972 earned 28 credits by the time fall term started in 1973, and earned an additional 12 credits during that fall 73 term (for a total of 40 credits), January, 1974 would be the start date for the sophomore year, and a time of 16 months would be counted as the length of time as a freshman. It was not necessary for the student to be registered for the first term at a higher level. For instance, if a student completed 32 credits in the fall and spring semesters, the first month as a sophomore would be June regardless of whether or not they were enrolled for the summer term. Hence the expectation of 9 months for the freshman year and 12 months for each of the remaining three years was defined as normal progress.

Transfer status: Transfer status was calculated based on the presence of two or more unique FICE codes associated with term records dated prior to BA award date. Only one FICE code indicated that no transfer had taken place. If more than one FICE code was associated with the undergraduate period, those with the earliest and latest date were compared by type and control (on the PETS transcript record). If type and control were the same, for instance both public 4-year, then no level or control change took place. As mentioned in the text, this may or may not have been a real transfer due to the cooperation between some campuses. Such coordination among campuses often involves no application or admissions requirements. A change from private 2-year to private 4-year or public 2-year to public 4-year would most likely be a real transfer required to complete all requirements for a BA degree and most probably required an application for admission to the final institution. A transfer across control, public to private or private to public, would be similar. While transfer between private and public 2-year colleges may occur, the change does not enhance the possibility of obtaining the BA degree. Therefore only changes across control into a 4-year college have been put into separate categories. Any other change not fitting into the five change categories mentioned were combined into "Other".

Accuracy of estimates

The NLS-72 sample, while representative and statistically accurate, is not a simple random sample. Students were selected within schools grouped in strata. Sampling rates for schools within different strata varied, resulting in better data for policy purposes, but at a cost of statistical efficiency for some estimates (e.g., totals) . Hence, simple random sample techniques for the estimation of standard errors frequently underestimate the true standard errors. In response to this problem, standard errors for all estimates in this report were calculated using Taylor Series estimation techniques which reflect the variability of the estimates due to sampling. No information was provided in this report for subpopulations with 30 or fewer cases.

Statements concerning differences in this report have been tested using Student's t-tests based on the estimated differences and standard errors of the estimates. Comparisons include estimates of the probability of a Type I error, and have been

limited to those having a probability of error of less than .01, providing 99 percent or higher confidence that there is in fact a difference. Estimates and standard errors are provided for the interested reader in Appendix B for each of the figures in the text. Student's t-values can be computed from this information using the following formula:

$$t = \frac{P_1 - P_2}{\sqrt{se_1^2 + se_2^2}}$$

where P_1 and P_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. While there are hazards in reporting several t statistics because the multiplicity increases the risk for error, the critical values used in this report (i.e., 2.58 for 99 percent confidence, and 3.29 for 99.9 percent confidence) are relatively conservative, so that the risk of sampling error, even for many t-tests, is quite low.

For more information

For more information about the estimates presented, or about the NLS data bases, contact Paula Knepper, National Center for Education Statistics, 555 New Jersey Avenue NW, Washington DC 20208-5652, telephone (202) 357-6914.

Table A-1. Distribution of weighted N's for the background and postsecondary characteristics used in the analyses.

Background characteristics	
Sex	
Men	50.9%
Women	49.1%
Race	
White	84.5%
Black	8.4%
Other	7.1%
SES	
Low SES	16.9%
Medium SES	46.7%
High SES	36.4%

Student PSE characteristics	
When started PSE after high school	
<1 year	77.1%
2-3 years	10.9%
>3 years	12.0%
How much PSE	
< 1 year	24.5%
1 full year	13.8%
2 full years	12.3%
3 full years	9.0%
BA degree	40.6%

PSE institution characteristics	
First institution type	
Private <=2-year	4.9%
Private 4-year	17.8%
Public <=2-year	38.0%
Public 4-year	39.3%
Transfer status	
No transfer	71.3%
No level or control change	9.3%
Private 2-year to private 4-year	0.3%
Public 2-year to public 4-year	7.2%
Any private to public 4-year	3.6%
Any public to private 4-year	3.3%
Other	5.0%

Appendix B.
Data for Figures

Table B-1. Data for figure 2.1

Percent of 1972 high school seniors enrolled for the first time in postsecondary education, 1972-1984, by selected background characteristics

	No Postsec-ondary	72-73	73-74	74-75	75-76	75-77	77-78	78-79	79-80	After 1980
Total	45.0	42.4	3.8	2.3	1.6	1.6	1.1	0.9	0.7	0.6
Total--se	0.55	0.56	0.16	0.12	0.11	0.10	0.08	0.08	0.07	0.07
Sex										
Men	43.0	44.2	4.3	2.3	1.7	1.7	1.1	0.7	0.5	0.6
Men--se	0.75	0.76	0.24	0.16	0.15	0.13	0.11	0.11	0.08	0.08
Women	47.0	40.7	3.3	2.3	1.5	1.5	1.0	1.1	0.8	0.7
Women--se	0.66	0.69	0.20	0.16	0.16	0.14	0.11	0.12	0.11	0.10
Race										
White	42.8	44.9	3.8	2.2	1.5	1.5	1.0	0.9	0.7	0.6
White--se	0.62	0.65	0.18	0.13	0.11	0.11	0.09	0.08	0.07	0.08
Black	55.9	30.3	3.1	2.8	2.5	1.7	1.1	1.2	0.7	0.7
Black--se	1.23	1.07	0.43	0.31	0.44	0.23	0.22	0.21	0.18	0.16
Other	56.6	29.9	3.9	2.3	2.3	1.7	1.3	1.2	0.4	0.4
Other--se	1.42	1.32	0.51	0.38	0.36	0.31	0.29	0.31	0.16	0.16
SES										
Low SES	64.5	23.3	3.0	2.0	1.9	1.6	1.1	1.1	0.8	0.6
Low SES--se	0.78	0.70	0.27	0.20	0.22	0.17	0.14	0.17	0.15	0.12
Medium SES	47.7	39.8	3.7	2.3	1.7	1.5	1.1	1.0	0.7	0.6
Medium SES--se	0.69	0.70	0.21	0.16	0.17	0.14	0.11	0.10	0.10	0.09
High SES	19.5	67.6	4.8	2.5	1.3	1.6	1.0	0.7	0.4	0.6
High SES--se	0.68	0.82	0.33	0.23	0.19	0.21	0.16	0.16	0.09	0.12

Table B-2. Data for figures 2.2-2.4

Postsecondary completion rates for 1972 high school seniors, 1972-1984, by highest level completed and selected background characteristics

	Highest Level Completed:				
	Less than 1 year PSE	Freshman year PSE	Sophomore year PSE	Junior year PSE	Earned BA degree
Total	24.5	13.8	12.3	9.0	40.6
Total--se	0.50	0.43	0.36	0.32	0.60
Sex					
Men	23.2	13.3	11.6	9.5	42.4
Men--se	0.69	0.57	0.47	0.44	0.84
Women	25.8	14.2	13.1	8.4	38.6
Women--se	0.70	0.60	0.54	0.48	0.83
Race					
White	23.0	13.3	12.4	8.5	42.8
White--se	0.54	0.45	0.40	0.33	0.65
Black	33.6	15.6	10.9	12.2	27.9
Black--se	1.60	1.37	1.03	1.62	1.71
Other	31.1	16.3	12.8	10.4	29.5
Other--se	1.86	1.59	1.19	1.21	1.87
SES					
Low SES	34.6	17.7	12.9	9.1	25.7
Low SES--se	1.21	1.07	0.83	0.80	1.08
Medium SES	28.2	14.4	14.0	8.7	34.8
Medium SES--se	0.74	0.59	0.56	0.43	0.74
High SES	15.0	11.0	10.0	9.2	54.8
High SES--se	0.65	0.57	0.55	0.52	0.93

Table B-3. Data for figures 2.5-2.7

Postsecondary completion rates for 1972 high school seniors, 1972-1984, by highest level completed and selected postsecondary characteristics

	Highest Level Completed:				
	Less than 1 year PSE	Freshman year PSE	Sophomore year PSE	Junior year PSE	Earned BA degree
Total	24.5	13.8	12.3	9.0	40.6
Total--se	0.50	0.43	0.36	0.32	0.60
When Started PSE					
Within 1 year H.S.	17.1	12.8	12.5	9.9	47.8
Within 1 year H.S.--se	0.48	0.47	0.42	0.39	0.67
2-3 years after H.S.	42.4	16.8	13.2	6.6	21.0
2-3 years after H.S.--se	1.61	1.23	1.14	0.78	1.34
More than 3 years after H.S.	55.8	17.4	10.4	4.9	11.6
More than 3 years after H.S.--se	1.59	1.27	0.97	0.63	0.99
Control and level of first institution					
Private 2-year or less	34.5	22.0	19.0	10.7	13.9
Private 2-year or less--se	2.56	2.36	1.97	1.63	1.79
Private 4-year	13.8	7.3	6.9	10.6	61.5
Private 4-year--se	0.98	0.69	0.67	0.88	1.35
Public 2-year or less	38.4	19.1	18.5	7.6	16.5
Public 2-year or less--se	0.89	0.83	0.67	0.45	0.75
Public 4-year	14.7	10.5	8.0	9.3	57.6
Public 4-year--se	0.62	0.54	0.48	0.50	0.91
Institutional change					
No transfer or change	29.8	14.7	12.2	6.6	36.8
No transfer or change--se	0.62	0.53	0.43	0.33	0.74
No level or control change	12.9	11.5	11.7	16.1	48.1
No level or control change--se	1.23	1.18	1.15	1.27	1.85
Private 2-year to private 4-year	10.6	0.0	13.8	13.8	61.8
Private 2-year to private 4-year--se	5.02	0.00	6.82	6.03	9.11
Public 2-year to public 4-year	2.6	5.5	11.4	13.3	67.2
Public 2-year to public 4-year--se	0.61	0.92	1.31	1.35	2.04
Private to public 4-year	5.8	6.6	9.4	13.3	65.0
Private to public 4-year--se	1.33	1.44	1.84	2.23	2.83
Public to private 4-year	7.0	5.8	7.0	11.1	69.0
Public to private 4-year--se	1.52	1.40	1.48	1.70	2.58
Other change	28.2	27.2	22.7	17.7	4.2
Other change--se	2.06	2.11	1.94	1.74	0.93

Table B-4. Data for figures 3.1-3.3

Time needed for the completion of each level of postsecondary education for 1972 high school seniors, by selected background characteristics

	Average # of Months:					
	To start	As freshman	As sophomore	As junior	As senior	Full BA degree
Total	14.1	17.5	14.8	14.4	15.0	54.2
Total--se	0.40	0.21	0.18	0.17	0.19	0.32
Sex						
Men	13.1	17.8	15.1	14.6	15.7	55.6
Men--se	0.45	0.30	0.26	0.23	0.27	0.46
Women	15.1	17.1	14.4	14.1	14.3	52.7
Women--se	0.65	0.29	0.24	0.24	0.27	0.42
Race						
White	13.5	17.1	14.7	14.2	14.9	54.0
White--se	0.45	0.23	0.19	0.18	0.21	0.34
Black	17.8	19.2	15.1	14.5	17.0	55.8
Black--se	1.00	0.70	0.49	0.56	0.78	1.10
Other	16.2	20.2	16.2	15.8	15.7	56.9
Other--se	1.21	0.80	0.60	0.70	0.71	1.20
SES						
Low SES	20.7	18.6	14.8	15.1	15.6	55.7
Low SES--se	1.03	0.51	0.34	0.54	0.58	0.97
Medium SES	14.9	18.0	14.8	14.9	15.3	54.7
Medium SES--se	0.56	0.33	0.27	0.29	0.31	0.50
High SES	9.8	16.5	14.8	13.7	14.6	53.5
High SES--se	0.46	0.29	0.28	0.23	0.26	0.43

Table B-5. Data for figures 3.4-3.7

Time needed for the completion of each level of postsecondary education for 1972 high school seniors, by selected postsecondary characteristics

	Average number of months:					
	To start	As freshman	As sophomore	As junior	As senior	Full BA degree
Total	14.1	17.5	14.8	14.4	15.0	54.2
Total--se	0.40	0.21	0.18	0.17	0.19	0.32
When Started PSE						
Within 1 year H.S.	3.1	16.6	14.6	14.3	15.1	54.1
Within 1 year H.S.--se	0.02	0.22	0.19	0.18	0.20	0.33
2-3 years after H.S.	20.8	23.2	17.0	16.3	13.9	56.6
2-3 years after H.S.--se	0.19	1.06	0.79	0.81	0.92	1.51
More than 3 years after H.S.	72.7	23.0	15.2	13.2	12.2	54.2
More than 3 years after H.S.--se	2.11	0.92	0.61	0.64	0.70	1.60
How much PSE completed						
Less than 1 year	24.6	low n	low n	low n	low n	low n
Less than 1 year--se	0.65	low n	low n	low n	low n	low n
One full year	14.6	26.3	low n	low n	low n	low n
One full year--se	0.74	0.76	low n	low n	low n	low n
Two full years	11.0	19.9	20.1	low n	low n	low n
Two full years--se	0.56	0.57	0.67	low n	low n	low n
Three full years	8.0	16.4	16.3	20.9	low n	low n
Three full years--se	0.52	0.44	0.43	0.70	low n	low n
BA degree completion	5.8	13.8	12.7	12.8	15.0	54.3
BA degree completion--se	0.18	0.16	0.11	0.12	0.19	0.32
Control and level of first institution						
Private 2-year or less	33.6	14.1	14.6	16.8	17.9	61.6
Private 2-year or less--se	5.43	0.97	1.10	1.44	1.68	3.00
Private 4-year	9.3	14.4	13.6	12.8	13.8	50.3
Private 4-year--se	0.55	0.32	0.26	0.21	0.37	0.48
Public 2-year or less	18.9	21.1	16.6	19.2	17.1	60.3
Public 2-year or less--se	0.59	0.45	0.40	0.58	0.50	0.81
Public 4-year	9.1	16.6	14.4	13.3	15.0	54.2
Public 4-year--se	0.34	0.28	0.23	0.17	0.25	0.42

Table B-5. Data for figures 3.4-3.7 -- continued

Time needed for the completion of each level of postsecondary education for 1972 high school seniors, by selected postsecondary characteristics

	Average number of months:					
	To start	As freshman	As sophomore	As junior	As senior	Full BA degree
Institutional change						
No transfer or change	16.6	16.6	14.2	13.3	13.9	51.0
No transfer or change--se	0.52	0.25	0.22	0.20	0.22	0.34
No level or control change	8.2	19.2	16.0	15.6	16.0	59.0
No level or control change--se	0.47	0.61	0.52	0.50	0.52	0.93
Private 2-year to private 4-year	8.5	14.2	20.9	low n	low n	low n
Private 2-year to private 4-year--se	2.41	1.91	5.67	low n	low n	low n
Public 2-year to public 4-year	6.2	17.5	14.2	17.3	17.3	61.1
Public 2-year to public 4-year--se	0.42	0.56	0.44	0.55	0.56	0.94
Private to public 4-year	6.1	16.4	15.5	13.8	17.5	58.6
Private to public 4-year--se	0.68	0.83	0.74	0.53	0.89	1.31
Public to private 4-year	7.3	17.7	14.3	14.4	17.4	60.7
Public to private 4-year--se	0.76	1.08	0.53	0.64	0.85	1.70
Other change	10.9	26.7	21.8	21.5	low n	low n
Other change--se	1.23	1.31	1.50	1.84	low n	low n

Table B-6. Data for figures 4.1-4.4

Percent of 1972 high school seniors spending the normal length of time or less verses a longer time at each level through the BA, by selected background characteristics

Level:	Freshman		Sophomore		Junior		Senior		Full BA	
Time:	Normal	Longer	Normal	Longer	Normal	Longer	Normal	Longer	Normal	Longer
Total	37.0	63.0	72.8	27.2	74.2	25.8	58.0	42.0	46.7	53.3
Total--se	0.73	0.73	0.67	0.67	0.71	0.71	0.93	0.93	0.99	0.99
Sex										
Men	34.6	65.4	70.7	29.3	72.6	27.4	53.9	46.1	41.1	58.9
Men--se	0.94	0.94	0.94	0.94	1.03	1.03	1.35	1.35	1.41	1.41
Women	39.6	60.4	75.0	25.0	76.0	24.0	62.7	37.3	53.2	46.8
Women--se	0.98	0.98	0.92	0.92	0.98	0.98	1.25	1.25	1.33	1.33
Race										
White	38.9	61.1	74.1	25.9	74.9	25.1	59.0	41.0	47.7	52.3
White--se	0.78	0.78	0.71	0.71	0.78	0.78	0.98	0.98	1.04	1.04
Black	25.7	74.3	66.1	33.9	70.0	30.0	49.0	51.0	42.8	57.2
Black--se	1.94	1.94	2.34	2.34	2.28	2.28	2.99	2.99	3.11	3.11
Other	23.9	76.1	61.3	38.7	67.2	32.8	50.4	49.6	34.1	65.9
Other--se	2.13	2.13	2.72	2.72	2.79	2.79	3.83	3.83	3.82	3.82
SES										
Low SES	33.2	66.8	68.6	31.4	70.6	29.4	55.5	44.5	44.1	55.9
Low SES--se	1.72	1.72	1.78	1.78	2.06	2.06	2.62	2.62	2.83	2.83
Medium SES	37.5	62.5	73.3	26.7	72.5	27.5	58.1	41.9	47.2	52.8
Medium SES--se	1.05	1.05	0.98	0.98	1.05	1.05	1.39	1.39	1.45	1.45
High SES	37.9	62.1	73.5	26.5	76.6	23.4	58.5	41.5	47.0	53.0
High SES--se	1.06	1.06	1.03	1.03	1.06	1.06	1.34	1.34	1.46	1.46

Table B-7. Data for figures 4.5-4.8

Percent of 1972 high school seniors spending the normal length of time or less verses a longer time at each level through the BA, by selected postsecondary characteristics

	Level:	Freshman		Sophomore		Junior		Senior		Full BA	
	Time:	Normal	Longer	Normal	Longer	Normal	Longer	Normal	Longer	Normal	Longer
Total		37.0	63.0	72.8	27.2	74.2	25.8	58.0	42.0	46.7	53.3
Total--se		0.73	0.73	0.67	0.67	0.71	0.71	0.93	0.93	0.99	0.99
When Started PSE											
Within 1 year H.S.		39.1	60.9	74.4	25.6	75.0	25.0	57.6	42.4	47.0	53.0
Within 1 year H.S.--se		0.78	0.78	0.69	0.69	0.73	0.73	0.96	0.96	1.01	1.01
2-3 years after H.S.		27.2	72.8	60.6	39.4	63.3	36.7	61.7	38.3	45.8	54.2
2-3 years after H.S.--se		2.11	2.11	2.65	2.65	3.27	3.27	3.96	3.96	4.13	4.13
More than 3 years after H.S.		20.8	79.2	57.8	42.2	67.8	32.2	68.4	31.6	38.0	62.0
More than 3 years after H.S.--se		2.21	2.21	3.04	3.04	4.08	4.08	5.40	5.40	6.02	6.02
How much PSE completed											
Less than 1 year		low n	low n	low n	low n	low n	low n	low n	low n	low n	low n
Less than 1 year--se		low n	low n	low n	low n	low n	low n	low n	low n	low n	low n
One full year		23.0	77.0	low n	low n	low n	low n	low n	low n	low n	low n
One full year--se		1.44	1.44	low n	low n	low n	low n	low n	low n	low n	low n
Two full years		30.8	69.2	56.1	43.9	low n	low n	low n	low n	low n	low n
Two full years--se		1.55	1.55	1.57	1.57	low n	low n	low n	low n	low n	low n
Three full years		33.2	66.8	60.2	39.8	49.5	50.5	low n	low n	low n	low n
Three full years--se		1.80	1.80	1.84	1.84	1.81	1.81	low n	low n	low n	low n
BA degree completion		44.9	55.1	81.1	18.9	80.0	20.0	57.9	42.1	46.7	53.3
BA degree completion--se		0.93	0.93	0.69	0.69	0.71	0.71	0.94	0.94	0.99	0.99
Control and level of first institution											
Private 2-year or less		57.7	42.3	68.1	31.9	59.1	40.9	46.6	53.4	29.1	70.9
Private 2-year or less--se		3.32	3.32	4.05	4.05	5.33	5.33	7.41	7.41	6.35	6.35
Private 4-year		48.3	51.7	78.5	21.5	81.6	18.4	65.4	34.6	62.7	37.3
Private 4-year--se		1.48	1.48	1.29	1.29	1.14	1.14	1.75	1.75	1.60	1.60
Public 2-year or less		28.7	71.3	66.9	33.1	54.2	45.8	45.6	54.4	26.9	73.1
Public 2-year or less--se		1.25	1.25	1.31	1.31	1.68	1.68	2.38	2.38	2.09	2.09
Public 4-year		35.9	64.1	73.7	26.3	78.4	21.6	58.3	41.7	45.3	54.7
Public 4-year--se		0.98	0.98	0.96	0.96	0.88	0.88	1.20	1.20	1.27	1.27

Table B-7. Data for figures 4.5-4.8 -- continued

Percent of 1972 high school seniors spending the normal length of time or less verses a longer time at each level through the BA, by selected postsecondary characteristics

Level:	Freshman		Sophomore		Junior		Senior		Full BA	
Time:	Normal	Longer	Normal	Longer	Normal	Longer	Normal	Longer	Normal	Longer
Institutional change										
No transfer or change	39.6	60.4	75.9	24.1	80.0	20.0	64.4	35.6	56.9	43.1
No transfer or change--se	0.87	0.87	0.81	0.81	0.81	0.81	1.12	1.12	1.17	1.17
No level or control change	32.3	67.7	66.3	33.7	66.3	33.7	50.8	49.2	29.8	70.2
No level or control change--se	1.89	1.89	1.93	1.93	2.09	2.09	2.70	2.70	2.54	2.54
Private 2-year to private 4-year	50.3	49.7	67.7	32.3	low n	low n	low n	low n	low n	low n
Private 2-year to private 4-year--se	10.43	10.43	9.00	9.00	low n	low n	low n	low n	low n	low n
Public 2-year to public 4-year	30.9	69.1	71.6	28.4	57.3	42.7	42.4	57.6	24.0	76.0
Public 2-year to public 4-year--se	2.07	2.07	1.74	1.74	2.12	2.12	2.72	2.72	2.26	2.26
Private to public 4-year	43.0	57.0	67.7	32.3	75.5	24.5	44.9	55.1	30.1	69.9
Private to public 4-year--se	3.04	3.04	3.07	3.07	2.73	2.73	3.78	3.78	3.39	3.39
Public to private 4-year	32.8	67.2	72.3	27.7	72.6	27.4	48.6	51.4	34.3	65.7
Public to private 4-year--se	3.07	3.07	2.92	2.92	2.98	2.98	3.79	3.79	3.53	3.53
Other change	21.5	78.5	50.9	49.1	50.2	49.8	low n	low n	low n	low n
Other change--se	2.29	2.29	3.57	3.57	4.93	4.93	low n	low n	low n	low n

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